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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/670,865	09/27/2000	Boon-Lock Yeo	YO9-97-348C	7873
7590 McGuireWoods LLP 1750 Tysons Boulevard, Suite 1800 McLean, VA 22102		11/28/2007	EXAMINER RAMAN, USHA	
			ART UNIT 2623	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/670,865	YEO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Usha Raman	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 21-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 21-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Arguments***

1. Applicant's arguments with respect to claims 21-38 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 21, 23, 25-30, 32, 34-35, and 37-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Shiga et al. (US Pat. 6,005,562).

With regards to claim 21, Shiga discloses a video viewing system comprising:

Means (remote control 5) for selecting a programming channel containing video program in progress;

A display screen (monitor 4) for viewing a video program in progress;

Shiga discloses a program guide displaying the still images of a plurality of programs currently airing on a display screen (see figure 4). The still images are derived from the video data, and therefore contain at least one frame from the currently airing video programs (see column 5, lines 18-21). A user may activate the program guide, which displays the plurality of still images overlaid on the screen with the current programming in the background (via menu button on remote control).

Once the user selects a program represented by one of the plurality of still images displayed on the screen, the channel corresponding to the picture is tuned to (see column 8, lines 3-15). Shiga also discloses that when a new channel is tuned to, the program guide information remains on the screen (see column 8, lines 54-61).

Therefore, in the event when a user tunes to a new channel while a program guide has been activated, the system is capable of displaying a program in progress and a summary frame comprising at least one frame from the program in progress.

Furthermore, as the summary frame is extracted from the video program, a viewer may encounter scenarios wherein the summary frame displays a past frame relative to the current play time of the video program in progress. Accordingly it is submitted that Shiga teaches all the limitations of claim 21.

With regards to claim 23, as discussed above in claim 21, since the summary frame is extracted from the video program, a viewer may encounter scenarios wherein the summary frame displays a past frame relative to the current play time of the video program in progress.

With regards to claim 25, Shiga discloses an interactive video viewing system comprising:

A display screen (monitor 4) for viewing a video program;

A summary frame displayed on the display screen at a same time (see fig. 4) and overlaid with the video program when the program channel is changed (see column 8, lines 54-61), the summary frame comprising at least one frame of a past or a future frame from the video program (see column 5, lines 18-25).

A control means (remote control 5) for *allowing* a user to change the video program and for *allowing* the user to select at least one summary frame to play at least a segment of the video program corresponding to the summary frame (see column 8, lines 34-45 and column 20, lines 4-7).

With regards to claim 26, the interactive video viewing system comprises a television system.

With regards to claim 27, summary frames remain on the display screen when the program is preempted (see column 8, lines 54-61).

With regards to claim 28, the user can delete the summary frames from the display screen (column 16, lines 48-51)

With regards to claim 30, Shiga discloses a method of selecting a plurality of summary frames depicting selected events from the video program (see 5, lines 18-21); embedding summary frames in the video program (see column 1, lines 39-41); transmitting the video program comprising summary frames over a media. A user may activate the program guide, in order to determine information on programs that are currently being aired. Once the user selects a program represented by one of the plurality of still images displayed on the screen, the channel corresponding to the picture is tuned to (see column 8, lines 3-15). Shiga also discloses that when a video program channel is tuned to, the program guide information remains on the screen (see column 8, lines 54-61). In the event when a user tunes to a new channel while a program guide has been activated, the system is capable of displaying a program in progress and a summary frame comprising at least one

frame from the program in progress. Shiga therefore teaches the step of simultaneously displaying the video program and the summary frames on a screen when a viewer selects the video program;

With regards to claim 32, summary frames remain on the display screen when the program is preempted (see column 8, lines 54-61).

With regards to claim 34, the video program and the summary frames are placed in designated windows on screen (see Shiga, fig. 4).

With regards to claim 35, Shiga discloses a scenario, wherein a user is viewing a video program in progress, accessing the program guide to display a data stream of summary frames, wherein a user can select a summary frame to change the video program.

With regards to claims 37, and 38, the system comprises at least one summary frames (data stream) comprising two or more summary frames displayed at the same time with video program in progress (see Shiga, fig. 4), wherein the data stream can comprise at least one past frame from the video program in progress.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
5. Claims 29 and 33 rejected under 35 U.S.C. 103(a) as being unpatentable over Shiga et al. (US Pat. 6,005,562).

With regards to claim 29, Shiga discloses a viewing system comprising television distribution system with clients. Shiga is silent on the viewing system comprises client connected to a server. Examiner takes Official Notice that it was well known at the time of the invention to receive video transmissions over the Internet. In such scenarios, the viewing system comprises a client connected to a server. Accordingly it would have been obvious to one of ordinary skill in the art to incorporate the teachings of Shiga to a viewing system comprising a client connected to a server, so that user can view video over communication networks such as the Internet.

With regards to claim 33, Shiga discloses a method of informing the viewer the content of video program in progress comprising the steps of:

Selecting a plurality of summary frames depicting selected event from a programming channel (see column 5, lines 18-21). Note the "video program in progress" is broadly interpreted to be the program stream received from the currently tuned channel.

Embedding the summary frames in the programming channel (see column 1, lines 39-41);

Transmitting the video program comprising the summary frames over a media;

A user may activate the program guide, which displays the plurality of still images overlaid on the screen with the current programming in the background (via menu button on remote control). Once the user selects a program represented by

one of the plurality of still images displayed on the screen, the channel corresponding to the picture is tuned to (see column 8, lines 3-15). Shiga also discloses that when a new channel is tuned to, the program guide information remains on the screen (see column 8, lines 54-61). In the event when a user tunes to a new channel while a program guide has been activated, the system is capable of displaying a program in progress and a summary frame comprising at least one frame from the program in progress. Shiga therefore teaches the step of simultaneously displaying the video program and the summary frames on a screen when a viewer selects the video program;

Shiga discloses that still images for 24 hours of programming are transmitted for a particular channel, however is silent on the step of displaying a plurality of selected frames corresponding to a particular channel in a chronological order. Examiner takes official notice that it was well known in the art to display channel specific data in a chronological order. Accordingly it would have been obvious to modify the display (fig. 4) of Shiga to display still frames of a channel in a chronological order when the user requests guide information, to inform the user of upcoming events in the currently tuned channel. In maintaining the display format of figure 4, the frames are written on the screen in a row direction of a table, and when the user moves cursor from one frame to another to obtain additional information, the frames from the table are read in a column only direction to interleave the plurality of selected frames on screen.



6. Claim 22 rejected under 35 U.S.C. 103(a) as being unpatentable over Shiga et al. (US Pat. 6,005,562) in view of Schein et al. (US Pat. 6,732,369).

With regards to claim 22, Shiga discloses that presenting a summary frame enables the user to "fully appreciate the type of television programs that are available in order to make an informed selection" (see column 1, lines 50-55). Shiga does not disclose the step of the summary frame displaying a video segment on the viewing screen corresponding to the summary frame. In an analogous art, Schein discloses a method of displaying a video summary frame from a program guide (see column 22, lines 50-56 and figure 17B). One of ordinary skill in the art can appreciate that such video summary gives a viewer a better idea of the program over still images, enabling user to make informed selection. Accordingly it would have been obvious to one of ordinary skill in the art to improve the system of Shiga with teachings of Schein by using a video summary frame, enabling user to make an improved selection thereby enhancing user experience.

7. Claim 24 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiga et al. (US Pat. 6,005,562) in view of Terasawa et al. (US Pat. 6,147,714).

With regards to claim 24, Shiga discloses that program guide information comprises still pictures from programs currently being aired as well as programs for the next 24 hours. Shiga is however silent on the step of displaying at least one preview frame comprising a future frame from the video program in progress. In an analogous art, Terasawa discloses that a user may highlight a current frame from a currently tuned channel, and use scroll keys to view a future frame from the currently

tuned channel (see figure 40 and column 20, lines 37-49). In this case, the "video program in progress" is broadly interpreted to be the program stream received from the currently tuned channel. Accordingly it would have been obvious to incorporate the teachings of Terasawa by enabling a user to use scroll keys to view future frames of the currently tuned channel.

With regards to claim 36, Shiga discloses a video viewing system comprising:

Means (remote control 5) for selecting a programming channel containing video program in progress;

A display screen (monitor 4) for viewing a video program in progress;

Shiga discloses a program guide displaying the still images of a plurality of programs currently airing on a display screen (see figure 4). The still images are derived from the video data, and therefore contain at least one frame from the currently airing video programs (see column 5, lines 18-21). A user may activate the program guide, which displays the plurality of still images overlaid on the screen with the current programming in the background (via menu button on remote control).

Once the user selects a program represented by one of the plurality of still images displayed on the screen, the channel corresponding to the picture is tuned to (see column 8, lines 3-15). Shiga also discloses that when a new channel is tuned to, the program guide information remains on the screen (see column 8, lines 54-61).

Therefore, in the event when a user tunes to a new channel while a program guide has been activated, the system is capable of displaying a program in progress and a summary frame comprising at least one frame from the program in progress.

Furthermore, as the summary frame is extracted from the video program, a viewer may encounter scenarios wherein the summary frame displays a past frame relative to the current play time of the video program in progress.

While Shiga discloses that program guide information comprises still pictures from programs currently being aired as well as programs for the next 24 hours. Shiga is however silent on the step of displaying at least one preview frame comprising a future frame from the video program in progress.

In an analogous art, Terasawa discloses that a user may highlight a current frame from a currently tuned channel, and use scroll keys to view a future frame from the currently tuned channel (see figure 40 and column 20, lines 37-49). In this case, the "video program in progress" is broadly interpreted to be the program stream received from the currently tuned channel. Terasawa discloses displaying data of a particular channel in a chronological order (see fig. 40). Terasawa is silent on the step of disclosing the plurality frames of a channel as the plurality of still pictures of the data stream. Examiner takes Official Notice that it was well known in the art at the time of the invention to display program guide information pertaining to a single channel, to inform the viewer of events on that particular channel. Accordingly it would have been obvious to modify the system of Shiga in view of Terasawa by displaying a plurality of summary frames of a channel in a chronological order at the same time in the data stream. Such a summary frame would comprise a preview frame comprising a future frame from the current channel displayed at the same time as a past frame overlaid on the channel in progress.

Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shiga et al. (US Pat. 6,005,562) in view of Ahmad et al. (US Pat. 6,263,507)

With regards to claim 31, Shiga merely discloses displaying a still picture so a user can "fully appreciate" the type of programs that are available to make an informed selection, wherein video programs corresponding to the summary frames are displayed when the summary frame is selected. Shiga is therefore silent on the step of displaying a video segment corresponding to a particular summary frame when the summary frame is selected, and resuming the video program when the video segment has finished.

Examiner takes Official Notice that video previews were well known in the art at the time of the invention. Ahmad further teaches the method of displaying a program recap at an accelerated rate, so that a viewer maybe caught up to the video at current position (see Ahmad, column 4, lines 47-56). One of ordinary skill in the art would have been motivated by teachings of Ahmad to provide an accelerated recap of a missed portion of video program by modifying the system of Shiga to provide such a recap as a video preview, to catch the viewer up to speed with the currently airing video, thereby enabling the user to fully appreciate the available programs to make informed selection. The video program of the modified system would resume when the accelerated recap of the video has finished playing.

### ***Conclusion***

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Arman et al. (US Pat. 5,606,655)


Steele (US Pat. 5,884,056)

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usha Raman whose telephone number is (571) 272-7380. The examiner can normally be reached on Mon-Fri: 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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